

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Metal Finishing Technologies Inc.

#### Connecticut State Technology Extension Program

#### Metal Finishing Technologies, Inc. Reduces Rework with Lean and Clean Advantage

##### Client Profile:

Metal Finishing Technologies, Inc. (MFT) is a nationally recognized supplier of metal plated products for aerospace, automotive, electronic, hardware, marine, medical, metal stamping, and telecommunication sectors. MFT's customers include Chrysler, Ford, General Electric, General Motors, Pratt & Whitney, as well the Department of Defense. The company employs 65 people at its facility in Forestville, Connecticut.

##### Situation:

Since 1998, MFT had realized that its automated rack zinc plating line was not performing to its optimal efficiency. The company estimated that the line was costing nearly \$80,000 in annual revenue due to high rates of rework, scrap, and waste. MFT Vice President of Operations, Bruce Wheeler, wanted to evaluate options to increase process line efficiency and reduce the rate of rework needed to meet customer demands. MFT already had a working relationship with Linda Darveau of the U.S. Environmental Protection Agency's (EPA) Region 1 Assistance and Pollution Prevention Office. As part of the assistance provided through her office, Darveau recommended that MFT investigate partnering with the Green Suppliers Network (GSN) Lean and Clean Advantage which targets and eliminates the root causes of waste. EPA, working in collaboration, with the U.S. Department of Commerce, established the GSN to help small and medium-sized manufacturers stay competitive and profitable while reducing their impact on the environment.

##### Solution:

Green Suppliers Network representatives Judy Wlodarczyk and Bill Caplan, of the Connecticut State Technology Extension Program (CONNSTEP), a NIST MEP network affiliate, trained the MFT review team and together they completed current and future state Value Stream Maps for the zinc plating line. With an existing rate of rework for the line at 15 percent, they confirmed that both scrap and rework contributed significantly to water, energy, and hazardous chemical usage and hazardous waste generation. The review team set a goal to cut the amount of rework in half. They identified 17 improvements for the process line, 13 of which could be implemented in less than one month. Implementing these improvements would reduce water usage by more than 120,000 gallons, as well as reduce solid hazardous chemicals used by 1,200 pounds and aqueous hazardous chemicals used by 130 gallons.

##### Results:

- \* Saved \$500 by removing unnecessary step from the process.
- \* Anticipated savings of \$6,000 per year.
- \* Reduced hazardous waste generation.

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**Testimonial:**

"Our experience working with CONNSTEP and the Green Suppliers Network has brought us benefits we never expected. It's a great team to work with!"

Bruce Wheeler, Vice President of Operations